

Japanese Patent Laid-Open Publication No. 10-312430**[Claim]**

1. A medical care information processing system comprising:
an IC card storing in memory at least user identification information and server information;
a network computer that can read and write to and from the IC card; and
a server that is accessible from the network computer through a communication network and that supplies the program and/or the data to the network computer as required,
wherein the network computer has functions to read the server information from the inserted IC card and access and transmit the user identification information to the server corresponding to the read server information, and
the server corresponding to the read server information judges whether the user identification information is justifiable or not, and if the information is justifiable, then reads user interface information from the database and transmits the information to the network computer connected, and enables access to the medical care information of the corresponding user.

Paragraphs [0001]-[0008]

[0001]

[Technical Field]

The present invention relates to a medical care information processing system, and more specifically to a system that uses a network computer ("NC") and an IC card, and that can provide highly sophisticated services with a simple configuration.

[0002]

[Prior Art]

Conventionally, various kinds of medical care information, for example, user blood pressure, body temperature, heartbeat waveform, and other measurement data, treatment, drug administration, and other treatment historical data (medical record data), or data on hospitals, clinics, pharmacies, and home delivery service providers of diets and articles for daily use, have not yet been computerized and networked, and have been controlled by individuals and hospitals. Consequently, when the user hopes to utilize these data, the user must go to the hospital and stores where such data are controlled. In addition, the data concerning the user which are controlled at specified places have not been accessible to the third party such as other hospitals.

[0003]

[Problems to be Solved by the Invention]

In the conventional services, for example, when the user goes to a plurality of hospitals as an outpatient, the living body information measured and treatment and drug administration information in one hospital are unable to be utilized at other hospitals. Therefore, there are problems in that the patient must undergo the same measurements and examinations a plurality of times, the accuracy of diagnosis is degraded, or drugs which shall not be administered simultaneously may be administered. In addition, when the user hopes to have the information on available time, places, etc. of various service facilities such as hospitals and stores, the user must search telephone numbers of service facilities in directories and inquire one by one, causing problems that it is not only troublesome but also there might be a possibility of missing the optimum one.

[0004]

It is an object of the present invention to provide a medical care information processing system that solves the above-mentioned conventional problems and can furnish highly sophisticated services using the NC and IC cards in a simple configuration.

[0005]

[Means of Solving the Problems]

The medical care information processing system according to the present invention A medical care information processing system comprises: an IC card storing in memory at least user identification information and server information; a network computer that can read and write to and from the IC card; and a server that is accessible from the network computer through a communication network and that supplies the program and/or the data to the network computer as required. The network computer has functions to read the server information from the inserted IC card and access and transmit the user identification information to the server corresponding to the read server information. The server corresponding to the read server information judges whether the user identification information is justifiable or not, and if the information is justifiable, then reads user interface information from the database and transmits the information to the network computer connected, and enables access to the medical care information of the corresponding user.

[0006]

The medical care information processing system according to the present invention enables the overall system to be configured inexpensively by using NC, and secures the security with respect to the access of the user to the medical care information by using the user identification information (ID) which NC possesses. The medical care

information processing system according to the present invention provides the database services to users so that the users can search information, place orders, make reservations, etc. with hospitals, various public facilities, stores, etc. by using NC at optional places.

[0007]

[Preferred Embodiments of the Invention]

Referring now to drawings, embodiments of the present invention will be described in detail as follows. FIG. 1 is a block diagram showing the configuration of the medical care information processing system according to the present invention. To the public communication network 1 such as Internet, ISDN, etc., a plurality of NC 3 and server 2 are connected, and each NC 4 is divided into, for example, Group 5 installed at the residence of relevant user individual, Group 6 installed at medical institutes such as hospitals, clinics, etc., and Group 7 installed at various service facilities such as public facilities, stores, etc.

[0008]

For example, the server 2 installed at the medical care information service company is accessible from NC 4 mentioned above via the communication network 1 and is also equipped with the database 3. The server 2 judges whether the user identification information (ID) entered from NC is right or not, and if it is right, the server 2 reads out the user interface information of the relevant user from the database 3 and supplies the application program and the data required by NC 4. In addition, the server 2 enables the relevant user to access the medical care information.

Paragraphs [0023]-[0026]

[0023]

Next discussion will be made on the contents of services of the server executed primarily at S26 of FIG. 4 (b).

(a) Remote measurement and diagnosis services:

For this service, the user measures, for example, blood pressure, body temperature, heartbeat, etc. by the living body information detector 13 connected to NC 4 at home and transmits the measured data to the server 2. The server 2 stores the data in the database 3 together with the time information. Furthermore, the server 2 conducts statistical processing and generates graph data and at the same time, compares with the specified abnormal judgment threshold values, and if the judgment results are abnormal, the server 2 notifies the measurement results to the physician in charge selected by the user in advance or hospitals, etc. in service at that time.

[0024]

The information is notified by sending the message to the relevant NC, if NC is connected. If NC is not connected, notification is done by FAX, a pager with message display functions, or telephone using the speech synthesis functions. The relevant user or the physician notified can read the graphed measurement results data from the server via NC for perusal to view them.

[0025]

(b) Individual medical information perusal service:

The physician in charge (home doctor) who has been selected by the user in advance and registered to the service company can access the individual medical care information of the relevant user by inserting the IC card of the physician. For this function, each user data in the database 3 includes the user attribute data such as general users, doctors, persons in charge of various kinds of service institutions or registered physician data, etc. For the individual medical care information, the whole or part of the measurement data of the above paragraph (a) and medical records shall be included. Specifically, the information includes name of disease, progress, prescription, contraindications, blood pressure at the normal time, heartbeat, portion and degree of disability, name of physician in charge, etc.. The medical record information is entered in real time at hospitals or the medical record is read by a scanner, etc. and the data is transmitted to the server, and the operator of the service company enters the data on behalf.

[0026]

(c) Medical institution search service:

For example, in order to know hospitals that are available in the nighttime, holidays, etc., a database of specialty, title, address, telephone/FAX numbers, opening day, office hour, etc. of medical institutions is compiled so that optional users can search the data. Server 2 holds the information on location of NC accessed and access time information. When the user hopes to obtain the information of the hospital presently in service, search is performed immediately with search keys including the information on location, time information, or specialty, and the results are transmitted to NC.

Paragraphs [0029]-[0030]

[0029]

(f) Self-interviewed medical test service:

Using NC, the physician asks the user to conduct the self-interviewed medical test such as CMI test, and the user uses, for example, a touch panel of NC to enter YES or NO on each question. The server analyzes the user's replies and sends back the

diagnosis-assist data such as names of possible diseases, etc. The physician diagnoses in reference to the relevant assist data.

[0030]

(g) Mail service

Selecting characters on the screen by a touch panel or providing a keyboard, etc. to NC 4 enables the user to prepare an e-mail and send it out. In addition, e-mails can be sent and received to and from external communication networks such as Internet, etc.

Fig. 1

